Rule 312 Amendment
U.S. Application Serial No. 10/082,818
Attorney Docket No. MR/98-004.C
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## B. IN THE "ABSTRACT" Section

Please amend the ABSTRACT section as directed below, specifically by adding the new (underlined) paragraph and deleting the old bracketed paragraph.

## **ABSTRACT**

A coil interface allows a neurovascular coil system to be coupled to a magnetic resonance (MR) system. The neurovascular coil system has an array of coils including a birdcage coil, a spine coil, and at least one neck coil, with the MR system being equipped with a number of receivers. The coil interface includes a plurality of input ports, a plurality of output ports, and an interface circuit. The plurality of input ports are for coupling to the coils of the neurovascular coil system, and the plurality of output ports for coupling to the receivers of the MR system. The interface circuit enables the input ports and output ports to be selectively interconnected, and thereby enables the neurovascular coil system to be selectively operated in (I) a neurovascular mode; (II) a high resolution brain mode; (III) a high speed brain mode; and (IV) a volume neck mode.

[A coil interface for coupling a phased array magnetic resonance imaging coil to a magnetic resonance imaging system. The coil interface includes a plurality of signal inputs and a plurality of output ports. Each of the output ports is associated with a receiver in the magnetic resonance imaging system. The coil interface also includes an interface circuit. The interface circuit selectively couples at least two of the signal inputs to at least one of the plurality of input ports. Where the coil is a quadrature phased array coil, a preferred embodiment allows the two quadrature signals to be acquired as a single signal, precombined at the RF level within the coil interface, or as two separate RF signals by two of the receivers of the magnetic resonance imaging system hardware.]